

**REMARKS**

Claims 1-4, 6-9, 26-27, 31-33 and 41-47 are pending in the application.

Claims 6-9, 27 and 31-33 have been withdrawn.

Claim 47 has been amended to clarify that the first person is asked to identify the *mixture of the floral odorant and the spice odorant* as either hedonically positive or hedonically negative.

The claims have been amended to merely clarify language used in the claims and/or the subject matter claimed. The scope of the claims is intended to be the same after the amendment as it was before the amendment. No new matter has been added with the amendments to the claims or the addition of the new claims.

**Rejection of Claims under 35 U.S.C. § 112(1).**

At pages 2-17, the Examiner rejected Claims 1-4, 26 and 41-47 under Section 112(1) for lack of enablement. This rejection is respectfully traversed.

The Examiner maintains that the specification fails to provide an adequate written description for the genus of an "oriental spice" odorant.

The Examiner also maintains that the specification fails to provide any example of a "hedonically positive mixture of a floral odorant and a spice odorant," or the details of the actual ingredients contained in an oriental spice or other spice odorant or floral odorant recited in the claims. (Office Action at page 4.)

The characteristics of the odorants in the mixtures recited in the claims are well understood in the odorant arts, and one skilled in the odorant arts would readily ascertain and provide suitable odorant mixtures from various sources that have the recited floral or spice odorant character that would achieve the desired effect when inhaled by a first person to modify the first person's perception of the body weight of a second person according to Applicant's invention as claimed.

Each of the floral and spice odorants recited in the claims — jasmine, lilac, lily of the valley, magnolia, rose, lavender, geranium, hyacinth, orange blossom, apple blossom, carnation, cinnamon, ginger, cloves, nutmeg and oriental spice — will possess a distinct and characteristic odor that is within the scope of the aroma that defines the particular odorant as it is understood and employed in the art.

One of ordinary skill in the odorant arts would be able to readily ascertain sources of the recited odorants and whether a substance had a floral aroma (e.g., jasmine, lilac, etc.) or spice aroma (e.g., cinnamon, ginger, oriental spice, etc.).

Applicant submits the following documents as evidence of how one skilled in the art uses and understands the terms "floral odorant" and "spice odorant" (and the listed odorants including oriental spice) and to show the acceptance of these terms in the art, as well as the use and construction applied to these terms by the USPTO.

For example, U.S. patents issued to Applicant Hirsch and other issued U.S. patents use these terms – which demonstrates the acceptance and an understanding of these terms in the art, as well as the construction applied to these terms and understanding of other Examiners in the USPTO.

For example, the claims of **U.S. Patent No. 5,885,614** (Hirsch) (Use of odorants to treat male impotence...) recite the use of an *oriental spice* odorant (and lavender, lily of the valley, rose, floral). See, for example, Claim 1 (and 16), and the Example and Table 1 listing the odorants and source of odorants (cols. 6-7).

1. A method of increasing penile blood flow in a male individual, comprising:

administering to the male by inhalation of an odorant in an amount effective to increase penile blood flow; the odorant selected from the group consisting of orange, a mixture of *lavender* and pumpkin pie a mixture of doughnut and black licorice, a mixture of pumpkin pie and doughnut, *lily of the valley*, black licorice, a mixture of doughnut and cola, a mixture of black licorice and cola, a mixture of *lavender* and doughnut, chocolate, strawberry, *rose*, green, apple, parsley, peppermint, musk lavender, vanilla, cranberry, pink grapefruit, *floral*, baby powder, *oriental spice*, *cinnamon buns*, roasting meat, cheese pizza, doughnut, cola, pumpkin pie, and buttered popcorn

<sup>35</sup> Results. The results are shown in Table 1 below. Sources of the odorants were Energy Essentials, IFF, AromaTech and essential oils.

TABLE 1

	Odorant/Odorant Mixture	Median*
50	Lavender and pumpkin pie	0.4000
	Doughnut and black licorice	0.2150
	Pumpkin pie and doughnut	0.2003
	Orange	0.1950
	Lily of the valley	0.1850
	Black licorice and doughnut	0.1300
	Black licorice and cola	0.1300
	Doughnut and cola	0.1250
	Lily of the valley	0.1200
	Buttered popcorn	0.0900
	Vanilla	0.0900
	Pumpkin pie	0.0850
	Chocolate	0.0800
	Musk	0.0790
	Cola	0.0700
	Parsley	0.0680
	Chesse pizza	0.0520
	Roasting meat	0.0519
65	Parsley	0.0490

TABLE 1-continued

	Odorant/Odorant Mixture	Median*
	Cinnamon buns	0.0400
	Green apple	0.0375
	Rose	0.0350
	Strawberry	0.0350
	Oriental spice	0.0350
	Baby powder	0.0325
	Floral	0.0320
	Chocolate	0.0275
	Pink grapefruit	0.0250
	Cranberry	0.0200

... \*Median penile blood flow

As another example, *U.S. Patent No. 5,904,916* (Hirsch) (Use of odorants to alter learning capacity) discloses and claims the use of a *floral* odorant. See, for example, Claim 1 below.

1. A method for enhancing learning in a normosmic person, comprising the following steps: administering to the person by inhalation a suprathreshold but not irritant amount of a floral odorant; wherein inhaling an amount of said odorant enhances the capacity of said person to learn a task ....

*USP 5,904,916* (Hirsch) further describes a "mixed floral odorant" (at col. 2, lines 3-9) and provides an Example that includes testing of odorants (oriental spice, lavender, etc.) and sources of the odorants (at cols. 7-8).

The *mixed-floral odorant* is a formulation of floral odorants preferably composed of a fresh, citrus, herbaceous, fruity, and floral odorant that will cause an enhancement in learning capacity of a subject. A useful mixed-floral odorant is a synthetic odorant commercially available, for example, from International Flavors and Fragrances, Inc. (IFF), New York, N.Y., as Mixed-Floral Odorant IFF No. 2635-AS.

Pre-testing of subjects with other odors, i.e., *oriental spice* (IFF 2245-HS), baked goods (IFF 2292-AS), *lavender* (essential oils), citrus (IFF 2898-HS), parsley (Aroma Tech 236938), and spearmint (essential oils), showed no effect on learning time in the trail-making test even though the subjects considered those odorants hedonically positive. This shows that positive hedonics alone are insufficient to improve learning. By comparison, the mixed floral scent caused a significant improvement in learning. This shows that the characteristics of the odor are essential.

Other patentees also claim and describe spice and floral odorants (including jasmine). See for example, *USP 5,324,490* (Van Vlahakis) (Deodorant container and perfumed stable gel assembly and method of manufacture ) in Claim 25 and the disclosure at col. 7, lines 52-64.

25. The improved perfumed stable gel composition of claim 11 wherein said perfume is selected from the group consisting essentially of lemon, bubble gum, cherry, spearmint, *jasmine*, green apple, baby powder, *spice* and *gardenia*.

...

The perfumed stable gel composition may also include a perfume in an amount of from about 50.0% to about 87.0% by weight of the composition. The preferred amount of perfume is about 75.0% by weight of the composition. The perfume agent enhances the odor characteristics of the product. Specific examples of suitable perfume agents include lemon, bubble gum, cherry, spearmint, green apple, baby powder, gardenia, *jasmine*, herbal, *spice*, and others. *The primary scents used are obtained from the fruity and floral scent groups. However, it is possible to produce any number of different scents depending on the type of scent desired.*

*USP 5,372,303* (Paul) (Air freshener and/or deodorizer dispensing system) describes air fresheners and/or deodorizers and a system for containing and dispensing the fragrance –

identifying and claiming spice and floral fragrances. See, for example, Claim 10 and at cols. 8-9, bridging paragraph.

...it has been found that the preferred oil-based fragrances are selected from the group consisting of fruity notes, *spices*, *cloves*, eucalyptus, *floral notes*, *jasmine*, *lavenders*, wintergreen, spearmint, and wood notes. By employing one or a combination of these oil-based fragrances in the preferred quantity of 95% by weight of the entire composition, the desired air freshening and/or deodorizing fragrance is attained and the desired long-lasting, air freshening/deodorizing effect is realized.

Other published references list the recited odorants. See, for example, *Doty* (The Smell Identification Test<sup>TM</sup> Administration Manual, Sensonics, Haddon Heights, N.J., 1983), which lists cinnamon, clove, lilac and rose odorants, among others (at pages 5 and 7).

Such use clearly shows that one skilled in the art uses and understands the terms floral and spice odorants, and the group of floral odorants (jasmine, lilac, lily of the valley, magnolia, rose, lavender, geranium, hyacinth, orange blossom, apple blossom, carnation) and spice odorants (cinnamon, ginger, cloves, nutmeg, oriental spice) recited in the claims.

In addition, other patentees have described and claimed methods and systems for identifying different fragrances and their elements (notes) and methods for producing fragrances. The synthesis of odorants within the scope of the claims is also well within the skill of the art, as evidenced, for example, by USP 5,031,764 (Medor) and USP 6,606,566 (Sunshine).

*USP 5,031,764* (Medor) (Apparatus for Designing Personalized Perfume) describes a system that includes strips of the fragrance of a note for producing custom fragrance. Meador identifies different fragrance families including fruit, floral, and oriental/spice, and distinguishing between different families of notes. See at col. 1, lines 43-50 (emphasis added).

The tapered sample strips secured to the border strip are *classified into family of notes* by color of the tapered sample strips, which are grouped together by the same family having the same color strip. *An example of the different fragrance families are fruit, floral, fantasy, herbal, oriental/spice, fougere, chypre/wood, and leather. It is therefore easy to distinguish between the different families of notes.* The individual tapered sample strips are further identified by indicia of name and number and arranged by family in an order that is optimum for sampling. The sample strips are arranged in order such that they are sampled from lightest to heaviest in fragrance. The lighter fragrances evaporate quickly, while the heavier fragrances evaporate more slowly. It is vital to the perfuming process to smell less distinctive, lighter fragrances first and the more distinctive, heavier fragrances last. This allows the olfactory glands to obtain a true scent of each fragrance.

**USP 6,606,566** (Sunshine) (Computer code for portable sensing) describes a computer-based system that includes an analyte detector and synthesizer that can be used for reconstructing and producing aromas and scents. USP 6,606,566 describes how an analyte can be analyzed and reconstructed – and also cites to a commercial analyte synthesizer – the "iSmell™" synthesizer available from Digiscents (Oakland, CA).

See at col. 12, lines 13-45 (emphasis added):

...As shown therein, the present invention includes an analyte synthesizer or dispenser 36. The analyte synthesizer 36 is a device which is capable of synthesizing or dispensing analytes based on input information and parameters. ...A conventional analyte synthesizer is the "iSmell™" synthesizer, or personal scent synthesizer available from Digiscents (Oakland California). The iSmell™ synthesizer is a software-controlled computer peripheral device that is capable of emitting a broad range of fragrances, smells and aromas using a combination and synthesis of primary odorants.

This embodiment may be used in the following manner. The signature of a known analyte is relayed by the field device 10 to the analyte synthesizer/dispenser 36 and thereafter the known analyte is reconstructed to produce either the actual fragrance, aroma, scent, or smell or a simulated version thereof. In addition, other analytes which are similar to the known analyte can also be reconstructed to offer a wider range of selection.

This embodiment including the analyte synthesizer/dispenser 36 can be used for various purposes. For example, an electronic library 14 can contain signatures of a myriad of consumer products including, but not limited to, perfumes, cigars, liquor, coffee, cosmetics, lipsticks, tobacco and wine. Using the system of the present invention, a consumer can, for example, physically smell a reconstructed sample of a particular brand of perfume having a characteristic signature, and if the consumer enjoys this brand of perfume, it is possible to suggest and then synthesize other perfumes with similar signatures that the consumer may also enjoy to provide a wider consumer choice.

In fact, **USP 6,606,566**, cites to Applicant Hirsch's **USP 5,885,614** as an example of how the system can be used to transmit the "signature" of a desired odorant to a synthesizer and dispensing to an individual for inhalation. See at col. 12, lines 46-67 (emphasis added):

The present invention can further be used for medical purposes, for example, delivering an odorant for inhalation via a computer network so as to stimulate the male sexual response. As described in *U.S. Pat. No. 5,885,614, which issued to Hirsch*, on Mar. 23, 1999, the use of odorants are useful for inducing or enhancing an erection, and as aids for a non-invasive treatment of male vasculogenic impotence. ... Preferred odorants... includes lavender, *oriental spice*... The signature of the desired odorant is transmitted via the Internet to the analyte synthesizer/dispenser 36. The desired odorant is thereafter synthesized and/or dispensed to the male by inhalation.

Each of the floral and spice odorants recited in the claims —jasmine, lilac, lily of the valley, magnolia, rose, lavender, geranium, hyacinth, orange blossom, apple blossom, carnation, cinnamon, ginger, cloves, nutmeg and *oriental spice* — will possess a distinct and characteristic

odor that is within the scope of the aroma that defines the particular odorant as it is understood and employed in the art.

The terms floral and spice odorants – and jasmine, lilac, lily of the valley, magnolia, rose, lavender, geranium, hyacinth, orange blossom, apple blossom, carnation, cinnamon, ginger, cloves, nutmeg and oriental spice odorants, have been utilized in various contexts including Applicant's own issued patents as well as other issued patents and publications, and, as such, indicate that the meaning of those terms is well understood by one skilled in the art.

As stated by the U.S. Court of Customs and Patent Appeals in *In re Borkowski*, 422 F.2d 904, 910, 164 USPQ 642, 646 (CCPA 1970), "there is no magical relation between the number of representative examples and the breadth of the claims; the number and variety of examples are irrelevant if the disclosure is 'enabling' and sets forth the 'best mode contemplated.'" As further stated by the CCPA, "[t]he sufficiency of the disclosure depends not on the number but rather on the nature of the claimed compounds per se and the nature of the supporting disclosures." *In re Cavallito*, 282 F.2d 363, 367, 127 USPQ 206, 207 (CCPA 1960).

According to Section 112, an Applicant is required to teach how to use an invention, and it is well settled that it is not necessary that the specification disclose every operative example when one skilled in the art is fully apprised by the disclosure of what the invention is and how to use it. A disclosure that contains representative examples which provide reasonable assurance to one skilled in the art that the compounds falling within the scope of the claim will possess the described utility is all that is required. The nature of the recited odorants is not ambiguous to one skilled in the odorants arts and would be readily ascertainable.

Applicant has provided a sufficiently enabling disclosure to meet the requirements of 35 U.S.C. § 112(1). That is, Applicant's disclosure is sufficiently enabling for one of ordinary skill in the art to make and use the invention disclosed and claimed, and the identification of odorants within the scope of the claims would not require undue experimentation.

The claims are limited to mixtures of certain floral and spice odorants that are hedonically positive and alter the inhaling individual's perception of body weight – and thus do not call for just any odorant or odorant mixture.

Applicant has described sources of commercial odorants, which are exemplary, that are within the scope of the claims. See at paragraph [0022] of Applicant's published application US 2004/0137086.

[0022] The preferred floral-spice odorant mixture is a formulation that essentially comprises a hedonically positive blend of floral and spice odorants and eliminates odorants that compete with the floral and spice accords or notes to provide a full effect on the individual inhaling the odorant mixture. Examples of floral odorants include jasmine, lilac, lily of the valley, magnolia, rose, lavender, geranium, hyacinth, orange blossom, apple blossom, carnation, and mixtures thereof. Examples of spice odorants include cinnamon, ginger, cloves, nutmeg, oriental spice, and mixtures thereof. In a preferred embodiment, a mixed floral odorant and a mixed spice odorant are employed. An exemplary floral and spice odorant mixture comprises *mixed floral odorant IFF-31854-11* and *mixed spice odorant IFF-91171 (oriental spicy)* and/or *IFF-91164 (floral semi-oriental spicy musk)* from International Flavors and Fragrances, Inc., (IFF), New York, N.Y. Floral and spice odorants, and other odorants for use in the present methods, are readily available from a variety of commercial sources, including, for example, IFF, Energy Essentials, AromaTech, Inc. (Somerville, N.J.), Florasynth, Inc. (Teterboro, N.J.), among others, and as essential oils.

From the commercial sources and the other information provided by Applicant, one skilled in the odorant arts would readily identify and formulate mixtures of suitable odorants that have the characteristics of the recited odorants to achieve the desired effect.

Known methods in the art can be readily used for identifying and/or preparing odorants within the scope of the claims – as evidenced by USP 5,031,764 (Meador) and USP 6,606,566 (Sunshine), as discussed above.

For example, it is well known in the art to utilize such methods as gas chromatography-mass spectrometry (GC-MS), among others, to determine the aroma components of an odorant compound. A gas chromatograph distinguishes compounds by comparing to a reference standard. See, for example, the following published Abstracts that address the identification of aroma components that contribute to various odorants:

Jordan et al., "Aromatic profile of aqueous banana essence and banana fruit by gas chromatography-mass spectrometry (GC-MS) and gas chromatography-olfactometry (GC-O)," *J. Agric. Food Chem.* 49(10):4813-7 (2001).

Zhou et al., "Identification and quantification of aroma-active components that contribute to the distinct malty flavor of buckwheat honey," *J. Agric. Food Chem.* 50(7): 2016-21 (2002).

Hamilton et al., "Measuring Farmstead Odors," Oklahoma Cooperative Extension Service, OSU Extension Facts F-1740 (06-1999), at (<http://agweb.okstate.edu/pearl/biosystems/general/f1740.htm>): use of a gas chromatograph with a mass spectrometer detector in odorant analysis.

*Kirk-Othmer Concise Encyclopedia of Chemical Technology*, John Wiley & Sons, Inc. (1985) at page 844 : use of instrumental techniques to separate and identify volatile organic substances, for example, capillary gas chromatography columns in tandem with a mass spectrometer, Fourier transform nmr spectroscopy.

Those of ordinary skill in the art of odor science would readily utilize such known and used instruments as a gas chromatograph with a mass spectrometer detector to identify and/or prepare an odorant as recited in the claims according to an established quality. The particular odor ingredients of such odorants mixtures would possess a particular "accord" (or "theme") based on particular "notes" according to the particular odorant – as understood by one of ordinary skill in the odorant arts.

Appellant has also described methods that can be used to **screen odorants** for effectiveness at paragraphs [0023]-[0024] of Applicant's published application US 2004/0137086.

Hedonic perception is an affective evaluation that centers on likes and dislikes (i.e., preferences). As defined at paragraph [0017], a "hedonically positive odorant or odorant mixture is one to which the individual has a pleasant or positive reaction to its scent." As described at paragraphs [0023] and [0025], screening an odorant and odorant mixture for positive hedonics can be conducted by administering the odorant/mixture to an individual who is questioned as to a positive or negative reaction to the pleasantness of the scent (i.e., to identify the composition as hedonically positive or hedonically negative).

In addition, in the Example at paragraph [0045], a panel *initially* judged the hedonics of the three odorant mixtures (#1 citrus and floral mixture; #2 sweet pea and lily of the valley mixture; #3 floral and spice mixture) – and then each of the subjects were queried on the hedonics of each of the Odorants 1-3, as stated at paragraph [0046].

Also see **USP 5,194,582** (Eldridge) (Process to deodorize an odorous poly(mono-1-olefin), which describes "hedonic tone" of an odor and its measurement at col. 6, lines 37-47 (emphasis added).

The odor panel then evaluated each polymer for both its odor intensity and its odor quality. ... The odor quality is a measure of how pleasant or how revolting an odor was perceived by the odor panelists while they ignore the odor intensity. The odor quality is also known in the art as the hedonic tone. The odor quality was measured on a scale of -5 to +5 where -5 meant that the sample had a revolting odor and +5 meant that the sample had a pleasant odor and 0 meant that the sample had a neutral odor...

See also **USP 5,066,686** (Fodor) (Deodorizing odorous polyolefins with low concentrations of inorganic oxidizing agents), which also describes measuring odor quality – or "hedonic tone" of an odor at cols. 4-5, bridging paragraph (emphasis added).

The odor quality (also referred to in the art as the *hedonic tone*) was a measure of how pleasant or how revolting a particular odor was perceived. This odor quality was measured on a -3 to a +3 scale where -3 represented a revolting odor and +3 represented a pleasant odor. The 0 point on this scale represented a neutral odor quality. For commercial reasons a neutral odor quality is usually desirable for a polyolefin product.

As described at paragraph [0024], screening an odorant and odorant mixture for effectiveness in modifying perception of body weight of another individual can be conducted by administering the odorant/mixture to an individual for inhalation, having the individual estimate the body weight of a person, comparing the estimate of the body weight to actual body weight of the person to provide a "difference value", comparing the difference value to a "control value" to determine the statistical significance of the difference value, and eliminating the odorant or odorant mixture as being ineffective for altering perception of body weight if not statistically significant. The control value can be derived by having the person estimate the body weight of the individual without inhaling the composition (or inhaling an odorless control composition), and comparing the body weight estimate with the actual weight of the individual to provide the control value, preferably before administering the test composition to be screened.

Based on Applicant's disclosure and the knowledge in the art, one skilled in the art would clearly be able to identify hedonically positive odorant mixtures for use in Applicant's methods.

Furthermore, the results of Applicant's experimental example in the Test Study, fully supports Applicant's claims that odorant mixtures can be administered to an individual to alter their perception of the body weight of another person.

Applicant has fully described an embodiment of his invention and the manner for ascertaining effectiveness. The nature and characteristics of the recited odorants are understood in the art and mixtures of such odorants can be readily prepared and used to practice the claimed invention without undue experimentation. *United States v. Teletronics, Inc.*, 857 F.2d 778, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988), cert. denied 490 US 1046 (1989).

Satisfaction of the enablement requirement of Section 112 is not precluded by the necessity for some experimentation, such as routine screening. The key word is "undue" not "experimentation." *In re Angstadt and Griffin*, 190 USPQ 214, 219 (CCPA 1976). A considerable amount of experimentation is permissible if it is merely routine, or if the specification provides a reasonable amount of guidance with respect to the direction in which the experimentation should proceed. *In re Jackson*, 217 USPQ 804 (Bd. App. 1982).

The odorants recited in the claims is well-delineated, the nature and character of the recited odorants is well understood in the odorant arts, one skilled in the art would readily identify suitable odorants that have the recited odorant character and would achieve the desired effect, and steps in administering an odorant composition are described and defined. As recited in the claims, suitable odorant mixtures are those having the recited characteristic of a mixture of a floral odorant and a spice odorant from the listed odorants, which are capable of altering perception of body weight when inhaled by another individual.

It would be a routine matter for one of ordinary skill to obtain and employ mixtures of the recited odorants, and readily determine without undue experimentation whether the odorant mixture works or not.

Applicant has provided a sufficiently supporting disclosure, both through the descriptive discussion and experimental example showing guidance and what is well known to those of ordinary skill in the art, to teach one of skill in the art how to make and use the invention as broadly as it is claimed.

Based on Applicant's disclosure and the understanding in the art, it is submitted that the requirements under Section 112(1) have clearly been met in the present disclosure, and that an art worker in this area is fully enabled to practice Applicant's invention as broadly as it is claimed.

Accordingly, it is respectfully submitted that the claims fully comply with Section 112(1), and withdrawal of this rejection is respectfully requested.

**Rejection of Claims under 35 U.S.C. §§ 101/112(1)**

At page 18, the Examiner rejected Claims 1-4 and 41-47 under Section 101 on the basis that the claimed invention is *not supported by either a credible utility or a well established utility.*

The Examiner also rejected Claims 1-4 and 41-47 under Section 112(1) on the basis that *"one skilled in the art clearly would not know how to use the claimed invention."*

Deficiencies under the "useful invention" requirement of 35 U.S.C. § 101 arise in one of two forms. The first is where it is not apparent why the invention is "useful." This can occur when an applicant fails to identify any specific and substantial utility for the invention or fails to disclose enough information about the invention to make its usefulness immediately apparent to those familiar with the technological field of the invention. *Brenner v. Manson*, 383 U.S. 519, 148 USPQ 689 (1966); *In re Fisher*, 421 F.3d 1365, 76 USPQ2d 1225 (Fed. Cir. 2005); *In re Ziegler*, 992 F.2d 1197, 26 USPQ2d 1600 (Fed. Cir. 1993). The second type of deficiency arises in the rare instance where an assertion of specific and substantial utility for the invention made by an applicant is not credible.

As the Federal Circuit has stated, "[t]o violate [35 U.S.C.] 101 the claimed device must be totally incapable of achieving a useful result." *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1571, 24 USPQ2d 1401, 1412 (Fed. Cir. 1992) (emphasis added). See also *E.I. du Pont De Nemours and Co. v. Berkley and Co.*, 620 F.2d 1247, 1260 n.17, 205 USPQ 1, 10 n.17 (8th Cir. 1980) ("A small degree of utility is sufficient...The claimed invention must only be capable of performing some beneficial function... An invention does not lack utility merely because the particular embodiment disclosed in the patent lacks perfection or performs crudely... A commercially successful product is not required... Nor is it essential that the invention accomplish all its intended functions ...or operate under all conditions ...partial success being sufficient to demonstrate patentable utility ...*In short, the defense of non-utility cannot be sustained without proof of total incapacity.*" If an invention is only partially successful in achieving a useful result, a rejection of the claimed invention as a whole based on a lack of utility is not appropriate. See *In re Brana*, 51 F.3d 1560, 34 USPQ2d 1436 (Fed. Cir. 1995); *In re Gardner*, 475 F.2d 1389, 177 USPQ 396 (CCPA), *reh'g denied*, 480 F.2d 879 (CCPA 1973); *In re Marzocchi*, 439 F.2d 220, 169 USPQ 367 (CCPA 1971).

Applicant has disclosed various uses of the methods recited Claims 1-4 and 41-47. The Examiner is directed to paragraph [0025] and the discussion at paragraphs [0055] to [0057], and the applications discussed at paragraphs [0008], [0011] and [0015].

For example, the method of the invention can be used to alter the perception of a second person (observer) of the body weight of an overweight individual, particularly an obese or morbidly obese individual, and thus increase the attractiveness and positive perception of the overweight/obese person to the observer. This can, in turn, have secondary effects on the overweight/obese person by enhancing a positive perception of themselves.

By inducing an effect by which an individual perceives herself as being perceived by others as being slimmer, it can induce a sense of attractiveness and thus self-confidence, which then can act to alleviate the impact of a variety of psychological conditions, not just anorexia or obesity but psychological disorders unrelated to weight such as social phobia and pathological shyness.

For individuals with body dysmorphic disorder and anorexia nervosa, where self-perception of the degree of obesity is markedly incongruent with reality, the use of a slimming odorant or mixture as a potential treatment approach is important. While many methods of treatment of bulimia nervosa and anorexia exist, none has been universally effective. Several treatments involve the reduction of anxiety. Individuals with eating disorders have also been shown to be more likely to experience social phobias. By wearing a pleasant odorant or odorant mixture that effectively lowers another person's perception of their body weight, an individual with such disorders can experience an increase in positive self image, which can reduce both anxiety and facilitate approach behavior in social situations.

Similarly, obese and morbidly obese women often avoid social situations due to an embarrassment of their body size and lack of self-esteem. Many obese patients have been characterized with deficient self-esteem, strong fears of rejection linked with a compulsion to please others, lack of self-assertiveness, poor work histories, and body image distortions. The use of a thinning odorant or odorant mixture according to the invention can break this downward cycle. Odorants can create a pleasant feeling towards others, facilitating the self-fulfilling prophecy that can influence the manner in which an individual is treated in social situations. In turn, the overweight individual may interpret this positive treatment as a sign of approval and reciprocate positive interaction with others. Therefore, the application of Applicant's methods

using a hedonically positive odorant mixture may encourage them to socialize more and thus achieve a better quality of life.

As discussed above, Applicant has provided a sufficiently supporting disclosure, both through the descriptive discussion and experimental example showing guidance and what is well known to those of ordinary skill in the art, to teach one of skill in the art how to make and use the invention as it is claimed without undue experimentation.

Applicant has demonstrated by way of the Example that odorant mixtures can be administered to an individual to alter their perception of the body weight of another person – as required by the claims. As such, Applicant has demonstrated that the invention is capable of performing and providing a useful result as described and taught in the specification.

Accordingly, withdrawal of the rejection of the claims for lack of utility is proper and respectfully requested.

**Rejection of Claims under 35 U.S.C. §112(2).**

At page 18, the Examiner rejected Claim 47 under Section 112(2) for the use of indefinite claim language.

Claim 47 has been amended to clarify that the first person is asked to identify the *mixture of the floral odorant and the spice odorant* as either hedonically positive or hedonically negative.

Accordingly, it is submitted that the claims are clear in their meaning and satisfy the requirements of Section 112(2), and withdrawal of this rejection is respectfully requested.

**Extension of Term.**

The proceedings herein are for a patent application and the provisions of 37 CFR § 1.136 apply. Applicant believes that a two-month extension of term is required. Please charge the required fee (large entity) to Account No. 23-2053. If an additional extension is required, please consider this a petition therefor, and charge the required fee to Account No. 23-2053.

It is respectfully submitted that the claims are in condition for allowance and notification to that effect is earnestly solicited.

Respectfully submitted,



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